

**Abstract of the Disclosure**

A method and system for predicting the content level of components in materials based on the response of the materials to near infrared radiation. One embodiment comprises electronically receiving a near infrared reflectance spectrum of a material from a customer, predicting the content level of a component in the material based on the spectrum, and electronically reporting the prediction to the customer. Another embodiment includes the exchange of the customer request and prediction report on a Web site or by electronic mail. Other embodiments include the prediction reports, and uses of the predictions, for example in quality control and toxicity evaluation.